Chemistry and Biology of Pteridines 1989

Pteridines and Folic Acid Derivatives

Proceedings of the
Ninth International Symposium on
Pteridines and Folic Acid Derivatives
Chemical, Biological and Clinical Aspects
Zurich, Switzerland, September 3–8, 1989

Editors
H.-Ch. Curtius · S. Ghisla · N. Blau

Walter de Gruyter · Berlin · New York 1990

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Inhibition of glycinamide ribonucleotide transformylase, methotrexate transport, and the growth of MCF-7 cells by 5,8-dideazafolates.
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Molecular modeling studies on deazatetrahydrofolates.
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In vitro and *in vivo* activity of the GAR transformylase inhibitor 5-deazacyclotetrahydrofolate.
Smith GK, Banks SD, Bigham EC, Cohn NK, Duch DS, Edelstein MP, Ferone R, Hanlon MH, Heath LS, Humphreys J, Kelley JL, Knick V, McLean EW, Mullin RJ, Singer S, Wilson HR, Houghton J 1015

In vitro and *in vivo* studies with 2-desamino-2-CH_3-N^{10}-propargyl-5,8-dideazafolate (ICI 198583), an inhibitor of thymidylate synthase.
Jackman AL, Newell DR, Jodrell DI, Taylor GA, Bishop JAM, Hughes LR, Calvert AH 1023

Comparative studies on the activity of methotrexate and the analog 10-ethyl-10-deaza-aminopterin (10-EdAM) against head and neck carcinoma cell lines and xenografts.
Braakhuis BJM, van Dongen GAMS, Brown DH, Snow GB, Peters GJ 1027

Transport of 5,10-dideazatetrahydrofolic acid (DDATHF) in CCRF-CEM sensitive and methotrexate resistant cell lines.
Pizzorno G, Moroson BA, Cashmore AR, Cross AD, Beardsley GP 1031

Synthesis and structure-activity relationship studies of 5,10-dideazatetrahydrofolic acid (DDATHF).
Shih C, Grindey GB, Gossett LS, Moran RG, Taylor EC, Harrington PM 1035

Synthesis and antifolate properties of 5-alkyl-5-deazaaminopterin analogues modified in the 10-position.
Piper JR, Montgomery JA, Sirotnak FM 1039

Synthesis and biological evaluation of 2-desamino-2-methyl-5,10-dideazatetrahydrofolate.
Patil SD, Kisliuk RL, Gaumont Y, Nair MG 1043

Quinazoline antifolate thymidylate synthase inhibitors: potent cytotoxic agents containing heterocyclic isosteres of the para-amino benzoate unit.
Marsham PR, Hughes LR, Hayter AJ, Oldfield J, Jackman AL, Bishop JAM, O'Connor BM, Calvert AH 1048

Antifungal activity of some 2,4-diamino-5-methyl-6-alkyl quinazolines.
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Membrane transport characteristics of the thymidylate synthase inhibitor 2-desamino-2-methyl-N^{10}-propargyl-5,8-dideazafolic acid.
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Taylor GA, Jackman AL, Balmanno K, Calvert AH, Bishop JAM, Marsham PR, Hughes LR 1072

Substitution on the benzene ring of quinazoline antifolates that inhibit thymidylate synthase.
Jackman AL, Thornton T, O'Connor BM, Bishop JAM, Bisset G, Calvert AH, Hughes LR, Oldfield J, Wardleworth JM, Barker AJ, Marsham P 1076

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Mechanisms underlying methotrexate inactivity in human head and neck cancer xenografts.
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van der Laan BFAM, Hordijk GJ, Jansen G, van Gestel JA, Kathmann GAM, Westerhof GR, Schornagel JH, Rijksen G 1127

Folate enhancement of antifolate synergism in lymphoma cells.
Gaumont Y, Kisliuk RL, Emkey R, Piper JR, Nair MG 1131

Amino acid oxidation and dihydrofolate reductase inactivation photosensitized by a diaminopteridine.
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Synchronisation of U937 and SW626 cancer cell lines of human origin using methotrexate.
Sen S, Erba E, D'Incalci M 1141

New inhibitors of plasmodial folate synthesis - comparison of cell-free, whole cell and *in vivo* activities for single drugs and drug combinations.
Wiese M, Kansy M, Kunz B, Schaper KJ, Seydel JK, Walter R, Chandra S 1145

Effect of vincristine on methotrexate cytotoxicity and accumulation in MCF-7 cells, a human breast cancer cell line.
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The γ-tetrazole analog of methotrexate: design, synthesis and biological activity.
Kalman TI, Jones CS, Yawman AM, Russel CA, McGuire JJ 1154

Effect of intravenous 24 hr infusions of methotrexate on unconjugated pteridine metabolism.
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Inhibition of the thymidylate synthase cycle of leukemia cells by antifolates: The usefulness of the cellular tritium release assay.
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Fluoroglutamate-containing folates and antifols: probing the role of polyglutamylation *in vitro*.
Coward JK, McGuire JJ, Galivan J 1198

Therapeutic strategies for 5-fluorouracil-leucovorin based upon cellular metabolic characteristics in human colon adenocarcinoma xenografts.
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The lack of response of human colonic tumor cell lines to biochemical modulation by folinic acid.
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Interaction of N-hydroxy(sulfo)succinimide active esters with the reduced folate/methotrexate transport system from human CCRF-CEM leukemia cells.
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Methotrexate- and folate-lipid conjugates of defined chemical structures as new antifolate analogs and transport probes.
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